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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,761	12/27/2001	Keizo Takechi	16869N-039000US	5771

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EXAMINER
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NGUYEN, JIMMY

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 04/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/032,761

Applicant(s)

TAKECHI ET AL.

Examiner

Jimmy Nguyen

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 5, 10, 11, 13, 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Person (US 5521493).

**As to claim 1, Persons discloses (fig 4)**

A driver circuit integrated with a load current output circuit (401), wherein driver circuit integrated with a load current output circuit (401) has a function as driver for applying a predetermined test waveform to a DUT (101), and a function as a load current output for reproducing an actual use situation by receiving load current to DUT (101) to judge a response (by the comparator 403) waveform by receiving response waveform from DUT (101), both functions being made up on a common circuit, operates as driver circuit when applying test waveform, and operates as load current output circuit when judging response waveform (as seen in the figure 4).

**As to claim 2, Persons discloses (fig 4)**

A driver circuit integrated with a load current output circuit (401), comprising: a buffer circuit (409) for a push pull operation, a constant current

portion (VIH, VIL, VCOMM), a current control portion (420) connected to an output terminal of buffer circuit (409) and constant current portion and constituted of an one way conduction element capable of supplying a current of one direction or reversed direction with respect to DUT (101), wherein driver function and load current output function are provided by controlling current at constant current portion.

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**As to claim 3,** Persons discloses (fig 4)

A driver circuit integrated with a load current output circuit (401) wherein current control portion (407) comprises a first terminal connected to buffer circuit (409), a second terminal connected to constant current portion (401a), and a third terminal for supplying a current to DUT (101).

**As to claim 4,** Persons discloses (fig 4)

A driver circuit integrated with a load current output circuit (401) wherein buffer circuit (409) is provided with switches (SW2) for controlling the push pull operation of buffer circuit.

**As to claim 5,** Persons discloses (fig 4)

A driver circuit integrated with a load current output circuit wherein current control portion is a diode bridge circuit (407).

**As to claims 10 and 11, 13, 14,** Persons discloses (fig 4) a pin electronic (400) IC provided with driver circuit integrated with load current output circuit.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

~~A person shall be entitled to a patent unless –~~

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 6 – 9, 12, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeuchi (US 4523312).

**As to claims 6, 7,** Takeuchi discloses (fig 5)


A driver circuit integrated with a load current output circuit (1) comprising: a first buffer circuit (39i) having a first output terminal; a second buffer circuit (41i) having a second output terminal; and a diode bridge terminal (6i) having a pair of a third and fourth output terminals each connected to first (3i) and second output terminals (41i) , wherein fourth output terminal (connect to 5i) supplies a current as a driver when outputting a test waveform to a DUT (10), and DUT (10) supplies a load current to fourth output terminal therefrom by turning the second buffer (41i) circuit OFF when judging a status of a response waveform by receiving waveform from DUT (10).

As to claims 8 and 9, 12, 15, These limitations are inherently within the scope of invention.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Nguyen at (703) 306-5858. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

JN.  
April 3, 2003

  
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